

Remarks/Arguments

Claims 21-45 are pending in the application. Claim 21 is currently amended. Claims 31-40 were withdrawn from consideration as being drawn to a non-elected invention. Claims 44 and 45 are new.

No new matter has been added herein. Support in the specification for the amendment to claim 21 can be found on page 7 of the specification paragraphs [0035] – [0040] and Fig. 5A which shows a non-zero value for the longitudinal slope and the lateral slope. Support in the specification for the new claims can be found in paragraphs [0022] and [0042].

A supplemental IDS is submitted herewith citing US Patent 6,182,007 titled "Incorporating Aspect Angle into Route Planners," by Szczerba. Szczerba does not teach or suggest Applicant's claimed invention since Szczerba teaches that the aspect angle is the orientation of a vehicle in relation to battlefield threats, column 3, lines 24-25. Szczerba does not teach or suggest Applicant's claimed invention of estimating at least one of roll data and pitch data where the roll data and pitch data are estimated using i) a maximum slope of ground with respect to a reference point for each cell traversed by the vehicle corresponding to the particular location, and the maximum slope having a non-zero longitudinal slope component and a non-zero lateral slope component, and ii) an aspect angle between a direction of the maximum slope and an axis with which a direction of travel is coincident.

In the Final Office Action, the examiner rejected claims 21-30 and 41-43 under 35 USC 103(a) as being unpatentable over Froeberg (US 6,028,550) in view of Staub (US 6,236,916). The examiner admits that Froeberg does not disclose estimating at least one of roll data and pitch data. Although Staub discloses roll data, Staub only takes into account one slope, and not the possibility where the ground may slope in a longitudinal direction and lateral direction. To the contrary, Applicant's claimed invention addresses the situation where the ground may slope in both a longitudinal direction and lateral direction. Estimating each of the roll or pitch data separately, takes into consideration i) the maximum slope having a non-zero longitudinal slope component and a non-zero lateral slope component, and ii) an aspect angle between a direction of the maximum slope and an axis with which a direction of travel is coincident.

Since none of the references takes into consideration a maximum slope having nonzero values for a longitudinal component and a lateral component, and an aspect angle between the direction of the maximum slope and an axis with which a direction of travel is coincident, when estimating roll or pitch data, none of the references teaches or suggests, alone or in any combination Applicant's claimed invention.

In conclusion, it is believed that this application is in condition for allowance, and such allowance is respectfully requested.

Any fees or charges due as a result of filing of the present paper may be charged against Deposit Account 04-0525.

Respectfully,

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